

***NATIONAL WEATHER SERVICE  
PRODUCT/SERVICE DESCRIPTION DOCUMENT (PDD)  
TYPE: Official Product  
DATE: June 06, 2003***

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HIGH SEAS FORECAST

**Part 1 - Mission Connection**

**1. Product/Service Description:**

The High Seas Forecast (HSF) is a text product designed to efficiently describe potentially hazardous weather across large areas of open ocean. The areas of responsibility are defined by the World Meteorological Organization (WMO) and include METAREAs IV, VI, and XII. The HSF meets the United States requirements as defined under the Safety of Life at Sea (SOLAS) conventions.

**2. Purpose/Intended Use:**

The HSF contains warning and forecast information out to 48 hours and is prepared every 6 hours. The HSF is intended to provide information for the protection of life and property and enhance the nations economy.

**3. Audience:**

The HSF is intended for use by mariners on the open ocean.

**4. Presentation Format:**

The HSF is a text message broadcast to mariners via High Frequency (HF) voice, the International SafetyNET, HF SITOR, and other means.

**5. Feedback Method:**

Continuous feedback is available via an Internet page email link to the program managers in the Marine and Coastal Weather Services. Feedback on this product is obtained at Focus Group meetings, from Boat Shows, and Customer Surveys.

Technical and policy questions, and comments for the CWF may be addressed to:

National Weather Service  
Attn: Brian LaMarre W/OS21  
Marine Program Manager  
1325 East-West Highway, Room 13118  
Silver Spring, MD 20910-3285

or e-mail questions and comments to: [Brian.Lamarre@noaa.gov](mailto:Brian.Lamarre@noaa.gov)

## Part 2 - Technical

### 1. **Format and Science Basis:**

The High Seas Forecast (HSF) is composed of the location of significant weather systems, their speed and direction of movement, associated wind warnings, radii of wind speeds from the cyclone center, and significant wave heights. Forecasters use a variety of conventional and remotely sensed sources of data and forecast model guidance to determine wind radii and significant wave heights.

The initial conditions, based on the surface analysis, satellite interpretation, QuikSCAT, and SSM/I among others, describes winds and seas associated with significant extratropical and tropical cyclones across the warning area.

The first part of the High Seas Forecast (HSF) describes WARNINGS in affect for systems with sustained winds of 34 knots or greater and for areas of Heavy Freezing Spray. Wind WARNINGS categories are: GALE (34 to 47 knots), STORM (48 to 63 knots), HURRICANE FORCE (64 knots or greater), TROPICAL STORM (for tropical systems 34 to 63 knots), and HURRICANE (or TYPHOON) (for tropical systems 64 knots or greater). The expected trends, movement and 24 hour, 48 hour forecast position and conditions are described.

The second part of the HSF consists of the SYNOPSIS AND FORECAST section which describes weather systems not meeting the warning criteria. Highlighted in this section are weather systems producing winds of at least 20 to 25 knots and seas of 8 feet. This portion describes the initial, 24 hour and 48 hour forecast positions along with associated conditions if appropriate. In addition the SYNOPSIS AND FORECAST may describe areas of dense fog (visibility below 1 NM), areas of moderate to light freezing spray, areas of significant convection, the location of the inter tropical convergence zone.

### 2. **Availability:**

The High Seas Forecasts are available on the world wide web at:

<http://www.opc.ncep.noaa.gov/shtml/NFDHSFAT1>  
<http://www.opc.ncep.noaa.gov/shtml/NFDHSFEP1>  
<http://www.nhc.noaa.gov/text/MIAHSFEP3.html>  
<http://www.prh.noaa.gov/hnl/pages/marine.html>

In addition these products are broadcast by the United States Coast Guard through several different means as listed at:

[http://www.opc.ncep.noaa.gov/broadcast\\_schedule/uscgbroadcast.html](http://www.opc.ncep.noaa.gov/broadcast_schedule/uscgbroadcast.html).

Additional information on Marine and Coastal product dissemination is available at:

<http://weather.gov/om/marine/home.htm>.

The following WWW Internet site is one location to access the HSF product:

<http://weather.gov/om/marine/forecast.htm>

### 3. **Additional Information:**

A description of Marine and Coastal Services policy, area of responsibility, abbreviations and

definitions, standards and guidelines, and means of product dissemination for the HSF product is described in NWS Instructions 10-301 to 10-304, and also in 10-311 which are made available on the Internet at:

[http://www.nws.noaa.gov/directives/010/operation\\_services.htm](http://www.nws.noaa.gov/directives/010/operation_services.htm).